



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/734,167

12/15/2003

Yoshihiro Katsumata

Q78821

2113

23373 7590 10/09/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

TRAN, THAO T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,167	Applicant(s) KATSUMATA ET AL.	
	Examiner Thao T. Tran	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 is/are allowed.
- 6) ☒ Claim(s) 17-21 and 25-31 is/are rejected.
- 7) ☒ Claim(s) 22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/18/2007 has been entered.
2. Claims 17-22, 24-32 are currently pending in this application. Claims 17 and 32 have been amended.
3. In view of the prior Office action, the prior art rejections of the claims have been withdrawn. Claims 22, 24, and 32 are now indicated as allowable. A new rejection of claims 17-21 and 25-31 is set forth below.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 17-21, 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruta et al. (US Pat. 5,182,579) in view of Kinoshita et al. (US Pat. 6,045,741).

Haruta discloses an ink storing absorbent material for an ink jet made with a flexible polyurethane foam, where the foam is the reaction product of a polyol, an isocyanate, a catalyst, and a blowing agent (col. 1, lines 54-61). One embodiment shows foams having compression magnifications of 3 and cell numbers of 30-50 per inch (about 30-50 per 25 mm) (col. 15 lines

Art Unit: 1711

18-26). Haruta teaches the polyurethane foam is made in the presence of a surfactant (see col. 20, ln. 28-42), thus the polyurethane foam is impregnated with the surfactant and the surfactant would also inherently be present at and adhere to the surface of the foam. Figure 11 in the reference shows a compression magnification of 2 to 10 times, significantly overlapping the instantly claimed range.

Although Haruta does not teach the ink permeation member and the ink absorbing member to be two different parts, it has been held that making separable parts would have been obvious in light of the integral part of the prior art, since the ink absorbent material of Haruta meets all the limitations in the presently claimed ink permeation and ink absorbing members. See MPEP 2144.04VC.

Haruta does not specify the amount of the surfactant used in the polyurethane foam.

Kinoshita discloses a polyurethane foam, comprising 1.5 parts by weight of a surfactant (foam stabilizer 1) in about 109 parts of total weight (see Table 1), which appears to read on the instantly claimed range.

Therefore, it would have been obvious to one of ordinary skill in the art to have used the amount of the surfactant, as taught by Kinoshita, in the invention of Haruta, since Kinoshita discloses that this amount has been conventionally used in the expansion of flexible polyurethane (see col. 4, ln. 7-12).

Allowable Subject Matter

6. Claim 32 is allowed.
7. Claims 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is a statement of reasons for the indication of allowable subject matter: no prior art has been found to teach, disclose, or fairly suggest an ink support, comprising an ink permeation member comprising denaturated sodium succinate as the surface active agent; in combination with all of the other limitations in claim 17 or claim 32.
9. Note that the examiner called on September 25, 2007 and left a message to inform Applicants of the allowable subject matter, but there was no response to the telephone call.

Response to Arguments

10. Applicant's arguments with respect to the rejection of the claims over Haruta in view of Mochizuki have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

Art Unit: 1711

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thao T. Tran
Primary Examiner
Art Unit 1711

tt